DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003790 Address: 333 Burma Road **Date Inspected:** 20-Aug-2008

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1430 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

Wang Sei Fa / Sun Bo **CWI Name: CWI Present:** Yes No N/A **Inspected CWI report:** Yes No **Rod Oven in Use:** Yes No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: OBG Deck Panel Repairs**

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector was present during the times noted above for observations relative to the work being performed.

Bay 3 – New Tower Shop

This QA Inspector randomly observed ZPMC welding and quality control personnel performing inspection, grinding, and Flux Core Arc Welding (FCAW) repairs of Orthotropic Box Girder (OBG) deck panel Partial Joint Penetration (PJP) welds. The deck panels in repair process are designated as: DP063-001, DP586-001, DP614-001, and DP579-001

In process deck panel repairs appear to be progressing in compliance with Caltrans Engineer Approved Repair Procedure.

Bay 2-New Tower Shop

This QA Inspector observed ZMPC welding personnel performing automated, in gantry, Flux Core Arc Welding (FCAW) of weld joints connecting longitudinal stiffener plates to skin plate East-E. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector observed continued Shielded Metal Arc Welding (SMAW) multi-pass tack welding and fit-up of longitudinal stiffener plates to skin plate East-B.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld

WELDING INSPECTION REPORT

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joint ESD1-SA294A/G-11A filler passes. The personnel was observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint ESD1-SA294A/G-7A(7B) filler passes. The personnel was observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

Bay 1-New Tower Shop

This QA Inspector observed ZMPC welding personnel performing automated, in gantry, Flux Core Arc Welding (FCAW) of weld joints connecting longitudinal stiffener plates to skin plates South-E and South-B. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint NSD1-SA180D/E-9A filler passes. The personnel was observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

This QA Inspector randomly observed ZPMC qualified welding personnel performing groove welding of weld joint SSD1-SA180C/E-9B filler passes. The personnel was observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process.

Tracking and Log Book

This QA Inspector reviewed the contract files and tracking logs for the Magnetic Particle Testing (MT), Ultrasonic Testing (UT), Welding Procedure Specifications (WPS), Procedure Qualification Records (PQR), and QC Inspector records for the deck panel repairs to date.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By:	Clifford,William	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer